

WHAT IS CLAIMED IS:

- 1 1. An air bag deployment control system, comprising:
2 a weight sensor which detects weight of an occupant sitting
3 on a seat of a vehicle; and
4 a controller which switches between deployment and non-
5 deployment modes of an air bag based on the occupant weight
6 detected by the weight sensor;
7 wherein the controller switches to the deployment mode
8 permitting deployment of the air bag when the detected weight of
9 the occupant is equal to or larger than a first threshold value
10 and switches to the non-deployment mode prohibiting deployment
11 of the air bag when the detected weight of the occupant is smaller
12 than a second threshold value; and
13 the second threshold value for switching from the
14 deployment mode to the non-deployment mode is set smaller than
15 the first threshold value for switching from the non-deployment
16 mode to the deployment mode.
- 1 2. The air bag deployment control system according to claim
2 1, further including an acceleration sensor which detects an
3 acceleration of the vehicle, and said controller further controls
4 deployment and non-deployment of the air bag based on the detected
5 acceleration of the vehicle.
- 1 3. The air bag deployment control system according to claim
2 1, including a plurality of said weight sensors which detect the
3 weight of the occupant sitting on the seat, and the controller

4 which switches between deployment and non-deployment modes of an
5 air bag based on the occupant weight collectively detected by the
6 weight sensors.

1 4. The air bag deployment control system according to claim
2 1, wherein said weight sensor is disposed beneath a sliding rail
3 of the seat.

1 5. An air bag deployment control method in which weight of an
2 occupant sitting on a seat of a vehicle is detected by a weight
3 sensor, the method comprising the steps of:

4 switching between deployment and non-deployment modes of
5 an air bag based on the occupant weight detected by the weight
6 sensor;

7 wherein a switch to the deployment mode which permits
8 deployment of the air bag occurs when the detected weight of the
9 occupant is equal to or larger than a first threshold value, and
10 a switch to the non-deployment mode which prohibits deployment
11 of the air bag occurs when the detected weight of the occupant
12 is smaller than a second threshold value ; and

13 the second threshold value for switching the deployment
14 mode to the non-deployment mode is smaller than the first
15 threshold value for switching the non-deployment mode to the
16 deployment mode.

1 6. The air bag deployment control method according to claim
2 5, the vehicle includes an acceleration sensor which detects an

3 acceleration of the vehicle, and deployment and non-deployment
4 of the air bag is further based on the detected acceleration of
5 the vehicle.

1 7. The air bag deployment control method according to claim
2 5, wherein the vehicle includes a plurality of said weight sensors
3 which detect the weight of the occupant sitting on the seat, and
4 the switching between deployment and non-deployment modes of an
5 air bag is based on the occupant weight collectively detected by
6 the weight sensors.